

FORM PTO-1390 MODIFIED	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER 620-349
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5) 10/516335 To Be Assigned	
INTERNATIONAL APPLICATION NO. PCT/GB03/02314	INTERNATIONAL FILING DATE 29 May 2003	PRIORITY DATE CLAIMED 30 May 2002	
TITLE OF INVENTION PHOTONIC SWITCH WORKING IN MOMENTUM-DIVISION-MULTIPLE-ACCESS (MDMA) MODE FOR MICROWAVE AND OPTICAL WAVELENGTHS BASED UPON THE MEASUREMENT OF THE SPIN, THE ORBITAL ANGULAR MOMENTUM AND THE TOTAL ANGULAR MOMENTUM OF THE INVOLVED PHOTONS			
APPLICANT(S) FOR DO/EO/US PADGETT et al			
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:			
<p>1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.</p> <p>2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.</p> <p>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</p> <p>4. <input type="checkbox"/> The U.S. has been elected by the expiration of 19 months from the priority date (Article 31).</p> <p>5. A copy of the International Application as filed (35 U.S.C. 371(c)(2)).</p> <p>a. <input checked="" type="checkbox"/> is attached hereto (face pages (2 sheets), 49 pages specification, 63 claims, 9 sheets drawings).</p> <p>b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</p> <p>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</p> <p>6. <input type="checkbox"/> An English language translation</p> <p>a. <input type="checkbox"/> of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (pages specification, claims & abstract (claims), sheets drawings, page Certificate of Translation).</p> <p>b. <input type="checkbox"/> of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. § 371(c)(5)).</p> <p>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))</p> <p>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</p> <p>b. <input type="checkbox"/> have been communicated by the International Bureau.</p> <p>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</p> <p>d. <input checked="" type="checkbox"/> have not been made and will not be made.</p> <p>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</p> <p>9. a. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</p> <p>b. <input type="checkbox"/> Declaration was submitted to the International Bureau during International Phase (see copies of Declaration (page Form PCT/RO/101 and Form PCT/IB/371 and first page of printed publication acknowledging receipt thereof attached).</p> <p>10. See item 6.b. above.</p> <p>Items 11 To 20 below concern document(s) or information included:</p> <p>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98 w/PTO-1449 Form and Intl Search Report.</p> <p>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included.</p> <p>13. <input checked="" type="checkbox"/> A FIRST preliminary amendment.</p> <p>14. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment.</p> <p>15. <input type="checkbox"/> A substitute specification.</p> <p>16. <input type="checkbox"/> A change of power of attorney and/or address letter.</p> <p>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825.</p> <p>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4).</p> <p>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</p> <p>20. <input checked="" type="checkbox"/> Other items or information. Amended Claims Sheets</p>			

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21. <input checked="" type="checkbox"/> The following fees are submitted:		CALCULATIONS PTO USE ONLY																				
BASIC NATIONAL FEE (37 C.F.R. 1.492(a)(1)-(5): <ul style="list-style-type: none"> -- Neither international preliminary examination fee (37 C.F.R. 1.482) nor international search fee (37 C.F.R. 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO.....\$1110.00 -- International preliminary examination fee (37 C.F.R. 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO\$950.00 -- International preliminary examination fee (37 C.F.R. 1.482) not paid to USPTO but international search fee (37 C.F.R. 1.445(a)(2)) paid to USPTO\$790.00 -- International preliminary examination fee (37 C.F.R. 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4)\$750.00 -- International preliminary examination fee (37 C.F.R. 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4)\$100.00 																						
ENTER APPROPRIATE BASIC FEE AMOUNT =		\$ 950.00																				
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input checked="" type="checkbox"/> 30 months from the earliest claimed priority date (37 C.F.R. 1.492(e)).		\$ 130.00																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>CLAIMS</th> <th>NUMBER FILED</th> <th>NUMBER EXTRA</th> <th colspan="2">RATE</th> </tr> </thead> <tbody> <tr> <td>Total Claims</td> <td>16</td> <td>minus 20 =</td> <td>0</td> <td>X \$18.00</td> </tr> <tr> <td>Independent Claims</td> <td>4</td> <td>minus 3 =</td> <td>1</td> <td>X \$88.00</td> </tr> <tr> <td>MULTIPLE DEPENDENT CLAIMS(S) (if applicable)</td> <td></td> <td></td> <td>\$300.00</td> <td>\$ 0.00</td> </tr> </tbody> </table>		CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		Total Claims	16	minus 20 =	0	X \$18.00	Independent Claims	4	minus 3 =	1	X \$88.00	MULTIPLE DEPENDENT CLAIMS(S) (if applicable)			\$300.00	\$ 0.00	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE																			
Total Claims	16	minus 20 =	0	X \$18.00																		
Independent Claims	4	minus 3 =	1	X \$88.00																		
MULTIPLE DEPENDENT CLAIMS(S) (if applicable)			\$300.00	\$ 0.00																		
Petition is hereby made to extend the current due date so as to cover the filing date of this paper and attachment(s) (\$110.00/1 month; \$430.00/2 months; \$980.00/3 months)		\$ 0.00																				
TOTAL OF ABOVE CALCULATIONS =		\$ 1168.00																				
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.		0.00																				
SUBTOTAL =		\$ 1168.00																				
Processing fee of \$130.00, for furnishing the English Translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 C.F.R. 1.492(f)).		+ 0.00																				
TOTAL NATIONAL FEE =		\$ 1168.00																				
Fee for recording the enclosed assignment (37 C.F.R. 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 C.F.R. 3.28, 3.31). \$40.00 per property		+ \$ 0.00																				
Fee for Petition to Revive Unintentionally Abandoned Application (\$1370.00 – Small Entity = \$685.00)		\$ 0.00																				
TOTAL FEES ENCLOSED =		\$ 1168.00																				
		Amount to be: refunded \$ Charged \$																				
a. <input checked="" type="checkbox"/> A check in the amount of \$1168.00 to cover the above fees is enclosed.																						
b. <input type="checkbox"/> Please charge my Deposit Account No. 14-1140 in the amount of \$_____ to cover the above fees. A duplicate copy of this form is enclosed.																						
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-1140. A <u>duplicate</u> copy of this form is enclosed.																						
d. <input checked="" type="checkbox"/> CREDIT CARD PAYMENT FORM ATTACHED.																						
e. <input checked="" type="checkbox"/> The entire content of International Application No. PCT/GB03/02314 and any U.S. and foreign application(s) corresponding thereto, and GB 0212551.6, referred to in this application is/are hereby incorporated by reference in this application.																						
NOTE: Where an appropriate time limit under 37 C.F.R. 1.494 or 1.495 has not been met, a petition to revive (37 C.F.R. 1.137(a) or (b)) must be filed and granted to restore the application to pending status.																						
CORRESPONDENCE ADDRESS																						
Direct all correspondence to:																						
<input checked="" type="checkbox"/> Customer Number:		23117																				
Type Customer Number here																						
<i>Mary J. Wilson</i> Mary J. Wilson NAME																						
Telephone: (703) 816-4000 MJW:tat		32,955 November 30, 2004 REGISTRATION NUMBER Date																				